



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/021,726

12/12/2001

Yen-Chang Chiu

39088/242049

4640

826

7590

04/12/2006

ALSTON & BIRD LLP
BANK OF AMERICA PLAZA
101 SOUTH TRYON STREET, SUITE 4000
CHARLOTTE, NC 28280-4000

EXAMINER

PHAM, BRENDA H

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/021,726

Applicant(s)

CHIU ET AL.

Examiner

Brenda Pham

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

BRENDA PHAM
PRIMARY EXAMINER

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

REASONS FOR ALLOWANCE

1. Claims 1-33 are pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4, 6-16, 20-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Brailean et al (US 6,134, 237).

Claims 1, 4, 6, 20, Brailean et al discloses a method for a data loss recovery in a wireless communication process comprising the steps of: receiving a wireless signal carrying a data frame by a wireless signal receiving apparatus, wherein said data frame includes a field containing a first data value representing a sequence number of said data frame, and said wireless signal receiving apparatus records a second data value representing a sequence number next to that of the last data frames being received by said wireless receiving apparatus; comparing whether said first data value is identical to said second data value, so as to determine whether said data frame is lost during said wireless communication process; and if said first data value is different from said wireless input apparatus to retransmit said data frame to said wireless signal receiving apparatus (see figure 2 and column 4, lines 54-67 and column 6, lines 23-32).

Claims 7-8 and 21-22, as explained in the rejection statement of claim 6 and 20 (parent claims), Brailean et al fails to teach wherein said wireless input apparatus includes an input interface for allowing a user to enter said input data signal and an input buffer for storing said input data signal therein. This limitation is inherently included in Brailean. Since the wireless input apparatus (101) in Brailean et al is a base station (101), it is inherently included an input interface for receiving input data signal from user.

Claims 9, 14, 23, 28, Brailean et al further teach wherein said wireless signal receiving apparatus further includes a microcontroller having decoder for decoding a data packet contained in said data frame into a series of output data signal (column 4, lines 15-19).

Claim 10, Brailean et al further teach wherein said wireless input apparatus (101) further includes a wireless communication transmitting module (107) for transmitting said wireless signal to said wireless signal receiving apparatus (105) through said channel.

Claim 11 and 25, Brailean et al further teach wherein said wireless input apparatus includes a memory for recording said data frame transmitted by said wireless input apparatus (column 4, lines 35-40).

Claim 13, Brailean et al further teach wherein said wireless signal receiving apparatus (105) includes a wireless communication receiving module (117) for receiving said wireless signal from said channel.

Art Unit: 2664

Claims 15, 29, Brailean et al further teach wherein said wireless signal receiving apparatus (105) further includes a register (N(R) of database 121) for storing said second data value therein (column 4, lines 54-65).

Claims 16 and 30, Brailean et al further teach wherein said wireless signal receiving apparatus includes an alarm signal generator for generating said alarm signal (see column 5, lines 4-22).

Claim 24, Brailean et al teach wherein said wireless input apparatus (101) further includes a wireless communication transmitting module (107) for transmitting said wireless signal carrying said data frame to said wireless signal receiving apparatus (105) through said channel, and a wireless communication receiving module (117) for receiving said request signal (see figure 1).

Claim 27, Brailean et al further teach wherein said wireless signal receiving apparatus (105) includes a wireless communication receiving module (117) for receiving said wireless signal carrying said data frame from said channel, and a wireless communication transmitting end (115) for transmitting said request signal.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Art Unit: 2664

Patentability shall not be negated by the manner in which the invention was made.

5. Claims 17 and 31 are rejected under 35 USC 103(a) as being unpatentable over Brailean et al (US 6,134,237).

Claims 17, 31, as explained in the rejection of claim 16 and 20 (parent claims), Brailean et al disclose all the claim limitations in parent claims. Although Brailean et al does not teach alarm signal generator is a buzzer, this limitation is well known in the art. It is well known in the art that the alarm unit may be any conventional, such as a buzzer.

Therefore, it would have been obvious to those having ordinary skill in the art at the time of the invention was made to implement an alarm signal generator to generates an alarm signal (e.g., a tone signal) in Brailean et al.

Claims 12 and 26, Brailean et al further teach wherein said wireless input apparatus includes a memory for recording said data frame transmitted by said wireless input apparatus (column 4, lines 35-40). Although Brailean et al does not teach wherein said memory is a first-in first-out memory, it is obvious to those having ordinary skill in the art to implement a FIFO memory in Brailean et al for recording data frame transmitted by wireless input apparatus.

6. Claims 2, 3, 5, 18, 19 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brailean et al (US 6,134,237) in view of Crisler et al (US 5,142,533).

Claims 2, 3, 5, 18,19, 32-33, Brailean et al further teach if said first data value is different from said second data value, generating an alarm signal by said wireless signal

Art Unit: 2664

receiving apparatus (column 5, lines 4-21); increasing said second data value recorded in said wireless signal receiving apparatus by one (column 4, lines 54-67); and decoding a data packet contained in said data frame into a series of output data signals (column 4, lines 54-57); if said first data value is different from said second data value, transmitting a request signal to a wireless input apparatus to request said wireless input apparatus to retransmit said data frame to said wireless signal receiving apparatus (column 5-6, lines 65-67 and 1-32, respectively.)

Although Brailean et al does not teach transmitting said output signals by said wireless signal receiving apparatus to a host computer, this limitation is well known and is teach by Crisler et al (US 5,142,533), see figure 1, element 140.

Therefore, it would have been obvious to those having ordinary skill in the art at the time of the invention was made to implement the system and method in Brailean et al to include a host computer connected with wireless signal receiving apparatus.

Response to Arguments

7. Applicant's arguments filed 04/03/06 have been fully considered but they are not persuasive. Applicant argued in REMARKS that, " the process for determining whether a data frame from a transmitting end to a receiving end is lost as disclosed in the present application is implement in the receiving end, i.e. the wireless signal receiving apparatus, as recited in amended independent claims 1 and 2 and in independent claims 6 and 20, in contrast with the transmitting end in the Brailean patent."

Examiner respectfully disagrees because Brailean et al teach comparing whether said first data value is identical to said second data value by said wireless signal receiving apparatus..." According to column 4, lines 54-67, Brailean et al teach, "When the transmitted data packet 130 arrives at the communication unit 105, the communication unit 105 employs its receiver 117 to receive and decode the data packet 130. The communication unit 105 extracts the packet sequence number 131 and compares the packet sequence number 131 to the present value of a receive tracking number (N(R)) maintained in the communication unit's tracking database 121."

Examiner believes Brailean et al teach all the claim limitations recited in amended independent claim 1 and 2 and in independent claim 6 and 20. Therefore, the rejection remains stand.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2664

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on (571) 272-7488.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

Brenda Pham

April 10, 2006



BRENDA PHAM
PRIMARY EXAMINER